

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-6 (Cancelled)

7. (New) A spectroscopic apparatus comprising:
a wavelength dispersion element on which light having one or more wavelength components is incident from an incidence member, for exerting spectroscopic effect on said light;

a first support member that supports said wavelength dispersion element indirectly; and

a second support member disposed between said wavelength dispersion element and said first support member to connect said wavelength dispersion element and said first support member,

wherein said second support member includes a rotation member for rotating said wavelength dispersion element in accordance with a difference in coefficient of linear expansion between said first support member and said second support member in environmental temperature.

8. (New) A spectroscopic apparatus comprising:
a wavelength dispersion element on which light having one or more wavelength components is incident from

an incidence member, for exerting spectroscopic effect on said light;

a first support member that supports said wavelength dispersion element indirectly;

a second support member that supports said wavelength dispersion element; and

a transmission member disposed between said first support member and said second support member to transmit a contraction/expansion amount of said first support member to said second support member when environmental temperature changes,

wherein said second support member includes a deformation member that elastically deforms, when environmental temperature changes, in accordance with a difference between the contraction/expansion amount of said first support member transmitted from said transmission member and a contraction/expansion amount of said second support member and a rotation member that rotates minutely in accordance with elastic deformation of said deformation member.

9. (New) A spectroscopic apparatus according to claim 8, wherein said second support member comprises a V-shaped member in which two arm members are joined via said deformation member of a thin form to form a V-shape as a whole, the angle formed by said two arm members being changed in accordance with contraction/expansion of said first support member and said V-shaped member.

10. (New) A spectroscopic apparatus according to claim 9, wherein coefficient of linear expansion ρ_b of said first support member, coefficient of linear expansion ρ_m of said second support member, length y of one of said two arm members, length z of the other of said two arm members and angle a formed by said two arm members satisfy the following formulas:

$$y/z = \{A \pm \sqrt{A^2 - 4}\} / 2$$

$$A = 2\cos a + \sin a \cdot \Delta a / (\rho_b - \rho_m),$$

where Δa is the rotation angle of said rotation member that can cancel a drift of said spectral image in the wavelength dispersion direction per 1°C environmental temperature change.

11. (New) A spectroscopic apparatus according to claim 7, further comprising a collective optical system that collects the light that has undergone said spectroscopic effect to form a spectral image, wherein rotation angle and rotation direction of said rotation member are arranged in advance so as to cancel a drift of said spectral image in the wavelength dispersion direction caused by change in environmental temperature.

12. (New) A spectroscopic apparatus according to claim 11, wherein said rotation member is adapted to cancel a drift of said spectral image in the wavelength dispersion direction based on a drift amount of said

spectral image relative to a change in environmental temperature that has been measured in advance for said spectroscopic apparatus without the rotation member.

13. (New) A spectroscopic apparatus according to claim 7, wherein said wavelength dispersion element is mounted on said rotation member in such a way that its wavelength dispersion direction is oriented perpendicular to the axial direction of said rotation member.

14. (New) A spectroscopic apparatus according to claim 7, further comprising:

an incidence member for causing light having at least one wavelength to enter said wavelength dispersion element; and

a collimating optical system for collimating light from said incidence member to cause the light to enter said wavelength dispersion element,

wherein said incidence member and said collimating optical system are supported by said first support member.

15. (New) A spectroscopic apparatus according to claim 14, further comprising:

a collective optical system for collecting light that has undergone spectroscopic effect by the wavelength dispersion element to form a spectral image; and

a light receiving element for receiving said spectral image,

wherein said collective optical system and said light receiving element are supported by said first support member.

16. (New) A spectroscopic apparatus according to claim 15, wherein said collimating optical system and said collective optical system include at least one common lens.

17. (New) A spectroscopic apparatus according to claim 15, wherein said light receiving element comprises a one-dimensional line sensor.

18. (New) A spectroscopic apparatus according to claim 15, wherein said light receiving element comprises a plurality of light receiving portions arranged on a surface on which the spectral image is formed by the collective optical system, and light incident on each light receiving portion has a different wavelength.

19. (New) A spectroscopic apparatus according to claim 8, further comprising a collective optical system that collects the light that has undergone said spectroscopic effect to form a spectral image, wherein rotation angle and rotation direction of said rotation

member are arranged in advance so as to cancel a drift of said spectral image in the wavelength dispersion direction caused by change in environmental temperature.

20. (New) A spectroscopic apparatus according to claim 19, wherein said rotation member is adapted to cancel a drift of said spectral image in the wavelength dispersion direction based on a drift amount of said spectral image relative to a change in environmental temperature that has been measured in advance for said spectroscopic apparatus without the rotation member.

21. (New) A spectroscopic apparatus according to claim 8, wherein said wavelength dispersion element is mounted on said rotation member in such a way that its wavelength dispersion direction is oriented perpendicular to the axial direction of said rotation member.

22. (New) A spectroscopic apparatus according to claim 8, further comprising:

an incidence member for causing light having at least one wavelength to enter said wavelength dispersion element; and

a collimating optical system for collimating light from said incidence member to cause the light to enter said wavelength dispersion element,

wherein said incidence member and said collimating optical system are supported by said first support member.

23. (New) A spectroscopic apparatus according to claim 22, further comprising:

a collective optical system for collecting light that has undergone spectroscopic effect by the wavelength dispersion element to form a spectral image; and

a light receiving element for receiving said spectral image,

wherein said collective optical system and said light receiving element are supported by said first support member.

24. (New) A spectroscopic apparatus according to claim 23, wherein said collimating optical system and said collective optical system include at least one common lens.

25. (New) A spectroscopic apparatus according to claim 23, wherein said light receiving element comprises a one-dimensional line sensor.

26. (New) A spectroscopic apparatus according to claim 23, wherein said light receiving element comprises a plurality of light receiving portions arranged on a surface on which the spectral image is formed by the collective optical system, and light incident on each light receiving portion has a different wavelength.